



U.S. Department
of Transportation

Research and
Special Programs
Administration

DOT-E 3549
(TENTH REVISION)

400 Seventh Street, S.W.
Washington, D.C. 20590

MA 2 9 1998

EXPIRATION DATE: April 30, 2000

(FOR RENEWAL, SEE 49 CFR SECTION 107.109.)

1. **GRANTEE:** U.S. Department of Energy (DOE), Washington, D.C.

(See Appendix A of this exemption)
2. **PURPOSE AND LIMITATION:** This exemption authorizes the transportation in commerce of certain forbidden explosives, up to 250 grams, as Class 1 explosives in special non-DOT specification inside packaging and outside packaging, overpacked in a UN4D plywood box. This exemption provides no relief from any regulation other than as specifically stated herein.
3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.
4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR 172.101, 173.54, 173.56 and 173.62.
5. **BASIS:** This exemption is based on U.S. Department of Energy's (DOE) application dated February 27, 1998, submitted in accordance with 49 CFR 107.109.
6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

Hazardous materials description/proper shipping name	Hazard Class/ Division	ID Number	Packing Group
Pentaerythrite tetranitrate (PETN), dry/ Substance, explosive, n.o.s., (PETN-dry)	1.1A	UN0473	II
Cyclotetramethylenetetranitramine (HMX) dry/ Substance, explosive, n.o.s., (HMX-dry)	1.1D	UN0475	II
Cyclotrimethylenetrinitramine (RDX), dry/ Substance, explosive, n.o.s., (RDX-dry)	1.1D	UN0475	II

For the N.O.S. entries above, the requirements of 49 CFR 172.203(K) must be met.

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. **PACKAGING** - Packaging prescribed is for quantities not to exceed 250 grams, in static shielding bags of 0.004 inch minimum thickness or a polyethylene bottle with walls 0.033 inches thick, with a waterproof lid. Each bag must be sealed with a metal strip and waterproof tape, and then inserted in polypropylene container. Desiccant and a moisture indicator must be included with the first bag when placed in the second container. If a polyethylene bottle is used, a double-seal, watertight lid with a wrapping of waterproof tape must be used. The assembled units must be placed in a reusable steel drum, (1A2) 8.5 inches deep by 6.5 inches in diameter (Mil Spec 24347-5) equipped with a liquid-tight, gasketed, bolted steel ring closure; or in small metal (aluminum) crimped-sealed containers, 3.625 inches diameter by 2.5 inches deep. Desiccant and a moisture indicator must be included with the container(s) when placed in the second polypropylene container (5 inches deep by 4.38 inches in diameter). The assembled units must be placed in a reusable steel drum, (1A2) 4.5 inches deep by 6.5 inches in diameter (Mil Spec 24347-3) and or a 7 inches deep by 6.5 inches in diameter (Mil Spec 24347-4), equipped with a liquid-tight, gasketed, bolted steel ring closure. Additionally, the void in this drum will be filled with water per 49 CFR 173.60. If shipments are to be made during a time when freezing weather may be anticipated, an antifreeze must be used in such proportions that freezing of the water, included with the shipment, will not occur while in transit. The assembly must then be placed in a 4 gallon capacity, 22 gauge reusable steel drum (1A2) (Mil Spec 27684-12). Voids in this drum will be filled with polyurethane foam pads. This drum must be also be gasketed and fitted with a strong bolt ring-type closure.

b. The completed assembly (ies) must further be placed in a UN 4D plywood box. The voids in this box must be filled with noncombustible cushioning material.

8. **SPECIAL PROVISIONS:** None as a requirement of this exemption.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle, rail freight, and Department of Energy contract cargo only aircraft.

10. **MODAL REQUIREMENTS:** None as a requirement of this exemption.

11. **COMPLIANCE:** Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. Section 5101 et seq:

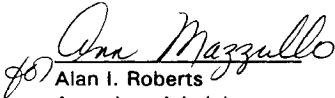
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in 49 CFR 171.8 who performs a function subject to this exemption must receive training on the requirements and conditions of the exemption in addition to the training required by 49 CFR 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. **REPORTING REQUIREMENTS:** The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:


Alan I. Roberts

Associate Administrator
for Hazardous Materials Safety

5/29/98
(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590 Attention: DHM-31.

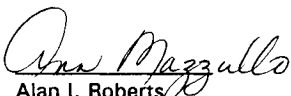
The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Dist: FHWA FRA

APPENDIX A

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with 49 CFR 107.107 and the public proceeding thereon or 107.109, as appropriate:

Company Name City/State	Applica- tion Date	PTE	Expiration Date	Issue Date
EG&G Star City, Inc. Miamisburg, OH	6/10/96	1	5/31/98	1/23/97
Los Alamos National Laboratory Los Alamos, NM	5/26/98	2	4/30/2000	5/29/98
Mason & Hanger Corporation Amarillo, TX	6/14/96	3	5/31/98	9/3/96
EG&G Mound Applied Technologies Miamisburg, OH	6/17/96	4	5/31/98	9/3/96
Sandia National Laboratories Albuquerque, NM	6/12/96	5	5/31/98	9/3/96
Lockheed Martin Energy Research Corporation Oak Ridge, TN	9/9/96	6	5/31/98	11/12/96
Lockheed Martin Energy Systems, Inc. Oak Ridge, TN	9/9/96	7	5/31/98	11/12/96
Lawrence Livermore National Laboratory Livermore, CA	9/23/96	8	5/31/98	12/5/96

for 
 Alan I. Roberts
 Associate Administrator for
 Hazardous Materials Safety